

*Cited Reference 3*

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-159762  
 (43)Date of publication of application : 21.06.1996

(51)Int.Cl. G01C 11/06  
 G01B 11/00  
 G01C 3/06  
 G06T 17/00  
 G06T 7/00

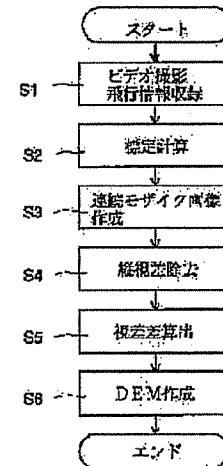
(21)Application number : 06-298224 (71)Applicant : ASAHI KOYO KK  
 (22)Date of filing : 01.12.1994 (72)Inventor : INOUE TORU

### (54) METHOD AND APPARATUS FOR EXTRACTING THREE-DIMENSIONAL DATA AND STEREO IMAGE FORMING APPARATUS

(57)Abstract:

PURPOSE: To produce DEM data from video images.

CONSTITUTION: An object region is picked up by a video means from the sky (S1). At this time, the position of a camera is measured by a differential GPS. The camera is mounted on a vibration isolator. The inclination of the camera is precisely measured based on the output of a gyroscope and the output of a magnetic bearing sensor. An external locating element is accurately determined by the matching of the fields, which are overlapped by 60% in the video image (S2). The leading line, the central line and the final line in each field are extracted and individually composed, and the continuous mosaic image, which becomes the front visual image, the visual image in direct underside and the rear visual image is formed (S3). The longitudinal parallax is removed from the continuous mosaic image (S4). The parallax difference is computed based on the front visual image and the rear visual image (or visual image in direct underside) (S5), and the altitude is computed based on the parallax difference (S6).



### LEGAL STATUS

[Date of request for examination] 27.11.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3541855

[Date of registration] 09.04.2004

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]